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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/521,667

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Minoru Kuroda

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03/17/2008

BRINKS HOFER GILSON & LIONE

P.O. BOX 10395

CHICAGO, IL 60610

EXAMINER

JUSKA, CHERYL ANN

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

03/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/521,667

Applicant(s)

KURODA ET AL.

Examiner

Cheryl Juska

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see paragraph spanning pages 1-2 of Response filed October 31, 2007, with respect to the rejections of claims 1-8 under 35USC 103(a) as being unpatentable over US 2004/0185222 issued to Kuroda have been fully considered and are persuasive. Specifically, applicant has provided an English translation of the foreign priority document, JP 2002-211542, thereby perfecting the effective filing date to 07/19/02. Said Kuroda reference is not available as prior art since it has an effective filing date of 12/22/03. Therefore, the rejections set forth in sections 1-3 of the last Office Action (Non-Final Rejection mailed 06/28/07) are hereby withdrawn. However, upon further consideration, new grounds of rejection are set forth below.

Claim Rejections - 35 USC § 102/103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4, 5, and 8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 10-137103 issued to Maekawa et al.

Maekawa discloses a pile fabric having pile made from a mixture of low shrink fibers and high shrink fibers (abstract). After a shrinkage treatment, the pile fabric comprises a two-step pile simulating long guard hairs and short down hairs (abstract). The high shrink fibers preferably have a hot water shrinkage rate of 20-50% (translation, section [00223]). The mixing ratio of the low shrink fibers to high shrink fibers are in the range of 20:80 to 80:20 (translation, section [0012]). The low shrink fibers, which form the long pile, have a denier range of 2-40 (2.2-44.4 dtex), while the high shrink fibers, which form the short pile, have a denier range of 1.5-20 (1.7-22.2 dtex) (section [0011]). The working examples produce a step pile length difference ranging from 2-5 mm (Examples 1-5 and Table). Additionally, the Table shows the fineness of the fiber forming the long pile is exemplified by 3, 5, and 7 denier or 3.3, 5.6, and 7.8 dtex (Examples 1-4 and Table). Furthermore, the working examples employ acrylic fibers having a flat cross-sectional shape (sections [0027] – [0031]).

Thus, Maekawa teaches the invention of claims 1, 2, 4, and 8 with the exception of (a) the claimed fineness ratio relationship $0.1 < (DL/DS) < 1.0$ and (b) the fineness of the short pile is 5-12 dtex. However, it is asserted that the Maekawa reference anticipates and/or obviates the presently claimed invention. Specifically, while Maekawa teaches the fineness of the high shrink fibers is in the range of 1.5-20 denier, it is asserted this range is descriptive of the fiber prior to shrinking. Since the shrinkage treatment renders the high shrink fiber into the short pile, the reference fails to explicitly teach the denier of the *shrunk* short pile. Yet, it is reasonable to presume that applicant's claim limitations of short pile fineness and fineness ratio are inherently

Art Unit: 1794

met by the teachings of Maekawa. Support for said presumption is found in the use of similar materials (i.e., short pile made from shrinkable acrylic fiber) and in the similar production steps (i.e., shrinkage treatment) used to produce the short pile. The burden is upon applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 495. In the alternative, the claimed short pile fineness and fineness ratio would obviously have been provided by the process disclosed by Maekawa. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. Therefore, claims 1, 2, 4, and 8 are rejected.

Regarding claim 5, Maekawa teaches a hot water shrinkage rate of 20-50%, but fails to explicitly teach a dry heat shrinkage percentage as presently claimed. However, it is reasonable to presume that said dry heat shrinkage percentage is inherent to the invention of Maekawa. Support for said presumption is found in the use of similar materials (i.e., high shrink acrylic fiber) and in the similar production steps (i.e., thermal shrinkage) used to produce the step pile fabric. The burden is upon applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 495. In the alternative, the claimed dry heat shrinkage percentage would obviously have been provided by the process disclosed by Maekawa. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. Therefore, claim 5 is also rejected.

Claim Rejections - 35 USC § 103

5. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Maekawa reference.

While the reference teaches acrylic fibers having a flat cross-sectional shape, Mackawa fails to teach a specific aspect ratio range of 5-15 for the short pile fibers. However, claim 3 is rejected over the cited prior art in that it would have been obvious to one skilled in the art to employ the claimed aspect ratio. Note it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Hence, claim 3 is rejected as being obvious over the prior art.

With respect to claim 7, the reference fails to explicitly teach an average pile length for the long pile of 12-25 mm. However, it would have been obvious to one skilled in the art to employ a pile length within the range claimed since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 205 USPQ 215. Note the length of pile will directly affect the pile hand and appearance. Therefore, claim 7 is also rejected.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Maekawa reference in view of US 5,976,693 issued to Miyoshi et al.

While Maekawa fails to teach the use of an organopolysiloxane on the surface of the fibers of the long pile portion, said use is well known in the art. Specifically, organopolysiloxanes are well known in the art as a finishing treatment for acrylic pile fabric, wherein said treatment smoothes the fibers and enhances the animal-like hand thereof. See Miyoshi, col. 1, lines 22-23. Hence, claim 6 is also rejected over the cited prior art.

Conclusion

7. The art made of record and not relied upon is considered pertinent to applicant's disclosure.
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Juska whose telephone number is 571-272-1477. The examiner can normally be reached on Monday-Friday 10am-6pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached at 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Cheryl Juska/
Primary Examiner
Art Unit 1794